

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: Douglas J Renze <drenze@grind>
Subject: [1435] "QRP Three-Bander CW Xceiver" from Handbook for 80/40m?
Message-ID: <Pine.3.05.9507022333.A8826-a100000@grind>

I've got a question...in the ARRL handbook is a plan for a QRP Tri-band transceiver for 18/21/24 MHz that was originally done by Zack Lau for the Oct '89 QST. It mentions in the article that this is "easily" adaptable for lower bands...and I was wondering, just how "easy" is "easy?" Ie, I'm looking for assistance/INSTRUCTIONS (hint...hint...subliminal suggestion) on how to adapt this rig for 80 and 40 meters especially. Tnx for any info you can offer.

Doug Renze, N0YVW * drenze@isca.uiowa.edu * N0YVW @ W0IUQ.ia.usa.na
DRenze@aol.com

Hitchhiking the Infobahn.

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: w9sz@prairienet.org (Zack Widup)
Subject: [1439] 2m R2-T2
Message-ID: <9507031404.AA22396@prairienet.org>

Hi Gang,

Has anyone built the 2 meter version of KK7B's R2-T2 boards, as in May '93 QST?

I built both VFO's described in the article; the premixed VFO works fine and has adequate output but the VXO has a very low output, not enough to sufficiently drive the splitters/DBM's.

I'm curious if anyone else had this problem. I don't know if I got an inactive crystal or a bad 74HC04. The IC is soldered dead-bug style into the bottom of the little VFO housing and I'd practically have to disassemble the whole thing piece by piece to change it.

73, Zack W9SZ

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [1446] 40M long wire sold
Message-ID: <199507031653.LAA11775@chuck.dallas.sgi.com>

Gang,

I have sold my 40M long wire for more than most of us make in a year. Hate to see it go. It was a good one.

Details at 11.

dit dit

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995

From: Aa4xx <aa4xx@nando.net>

Subject: [1451] AA4ZX/8 Copies Beacon

Message-ID: <Pine.SUN.3.90.950703142543.27025D-100000@merlin.nando.net>

Gang,

I am absolutely astonished that Dave, AA4ZX/8 in WV has successfully copied the 500 microwatt beacon. He emailed me this afternoon with the correct 4 letter codeword.

I'll not give the codeword away until after the 4th, in hopes that others might give it a try. Good Luck, and congratulations to Dave.
Paul, AA4XX

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995

From: Aa4xx <aa4xx@nando.net>

Subject: [1433] Beacon Results

Message-ID: <Pine.SUN.3.90.950702231921.975B-100000@merlin.nando.net>

Thanks to Brad, WB8YGG, in upstate NY and Dave, AA4ZX/8 in WV, who reported hearing the 1 mW beacon. Brad reports that at least 3 NY stations copied the beacon.

Let's make things a little more interesting...Starting 8 AM Monday morning, running thru 10 PM Tuesday, the beacon will be running at 500 microwatts output.

Any reception reports would be much appreciated.

The beacon frequency is 7052.0 KHz +/- 0.2 KHz. The keying is done with a Super CMOS II keyer, running in repeat mode. This keyer is ideally suited for this purpose!

The beacon message is as follows:

VVV VVV VVV 500 microwatts <4 letter codeword> de AA4XX/B

Any station who successfully copies the 4 letter codeword has my utmost respect and admiration... 72 and Happy July 4th,
Paul, AA4XX (Raleigh, NC) (919) 779-1637

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: jpo@acd4.acd.com (Jim Osburn)
Subject: [1442] Copper Top Dummy Load and Indicator
Message-ID: <9507031402.AA25011@IEDVB.acd.com>

Copper Top Dummy Load and Indicator

by Jim Osburn, WD9EYB

I needed a 9 V battery and the Copper Top ones with the testers were on sale, so I bought one. After installing the battery, I was about to throw away the package with the tester when I started to wonder if the tester would work as a dummy load and power output indicator for QRP operation. Here is a summary of the experiments I performed and my conclusion about the usefulness of the Copper Top tester.

The Copper Top tester is easy to remove from the 9 V battery package. A little glue holds it to the plastic. By pulling carefully, the tester pops right out. I discarded the rest of the package.

The Copper Top tester has three liquid crystal indicators on the front, two marked replace, and one marked ok. On the back of the tester there is an area for connecting the battery under test, and three resistive elements behind the three indicators on the front. The first element behind the first replace indicator is smallest, the second element behind the second replace indicator is intermediate in size, and the third element behind the ok indicator is largest.

My first experiment was to measure the D.C. resistance of the tester. I used my DMM. The resistance measured was 65 Ohms, close enough to 50 Ohms for a dummy load to experiment further.

My second experiment was to measure the SWR of the tester using my antenna analyzer at radio frequencies. The antenna analyzer indicated a SWR of 1.4:1 up to about 21 MHz. Above 21 MHz the SWR started to rise but was still only 1.6:1 at 28 MHz. This is good enough to proceed to the next experiment.

My third experiment was to connect a transmitter with variable power output to the tester. I used a coaxial cable with alligator clips on one end to connect to the tester. My tests were done at a frequency of 7.04 MHz. I used a QRP Wattmeter to measure the power I was putting into the tester.

I first put 350 mW into the tester. The first replace indicator cleared but the other indicators remained black. I then put 500 mW into the tester. The second replace indicator cleared, the ok indicator remained black. I then put 650 mW into the tester and the ok indicator cleared. All indicators were then clear.

I was starting to think the Copper Top tester was a pretty neat thing when it failed catastrophically, a little puff of smoke came out of the tester. I immediately killed the transmitter. No people were hurt, no equipment was damaged.

The failure occurred about thirty seconds after first applying power to the Copper Top tester. Examination of the tester showed that the resistive element behind the first replace indicator, the smallest one, the one dissipating the most power, had failed. It was badly warped. The other two resistive elements looked ok. The Copper Top tester used in these experiments has been discarded.

My conclusions about the use of the 9 V Copper Top tester as a dummy load and power output indicator for QRP applications are these. It works. The tester can be used for short duration, less than 10 seconds, QRP transmitter power output testing. It is not useful for transmitter power output adjustments that take longer than 10 seconds. The tester will fail after about 30 seconds of full power, which is about 650 mW.

You can use the 9 V Copper Top tester as a quick check of transmitter output. I wouldn't buy one just to make a power output indicator and dummy load. But, the next time I need a 9 V battery, and the Copper Top batteries are on sale, I'm going to save the tester.

73,

Jim, WD9EYB

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: Jim Stafford-W4QO <w4qo@america.net>
Subject: [1450] FS: HW-9 Matching Tuner and SWR meter
Message-ID: <Pine.SV4.3.91.950703140022.2407E-100000@atl11.america.net>

A friend of mine has the matching equipment. It may in fact be a wattmeter in that dark brown color to match the HW-9. He would like to get \$70 for the pair, shipping included. Any interest?

73/72/jim/w4qo

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: "David D. Meacham" <ddm@datatamers.com>
Subject: [1434] Mechanical filters
Message-ID: <Pine.3.89.9507022108.A26391-0100000@dt1.datatamers.com>

Gang,
I have orders for all the filters, now. Sorry there wern't more!
72, Dave, W6EMD

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: "Richard Hieber" <SZ0026@daphne.rrze.uni-erlangen.de>
Subject: [1443] Mizuho DC-7D, etc.
Message-ID: <ADF7E63D92@daphne.rrze.uni-erlangen.de>

Hi gang,

the following message was sent out last week already, but it didn't see it come up on the server and, predominantly, I didn't get any response. So here it goes again. My apologies if you've seen it before.

First the one thing that the title line is referring to:

```
| For a friend of mine I am looking for the schematics of the      |
| Mizuho DC-7D rig. He got one without schematics, and something  |
| isn't working alright. So if you have the schematics, email me  |
| and we'll strike a deal ;-) Of course copying and mailing costs |
| will be reimbursed.                                             |
```

Just came back from the Hamradio convention in Friedrichshafen. Had a nice time, but did a lot of running around and looking, so both eyes and feet grew weary. 21.000 visitors this year, a slight increase over last year. Had the pleasure of meeting George, G3RJV, and Dick, G0BPS, at the G-QRP Club booth and shaking hands with them. Nice guys! They were quite busy with visitors, and Dick sold a good many of his QRP crystals.

I spent a good deal of my money on books. Bought the two QRP books in German that there are on the market. One of them was probably not worth the money, but I didn't have time to do much more than a superficial scimming. The second one seems to be more profound, though. Then I happened upon Les Moxon's second edition of "HF antennas of all locations" which seems to be just marvellous. I love it! When I first opened the book I saw an impressive picture of an antenna which is

essentially a two element delta loop but according to the mechanical construction it's called a Claw Antenna. Anyone else loves to fantasize about the construction of HF antennas, especially big wire contraptions? Well, I certainly do ;-). If I would shell out the money for three more 10m telescopic fibreglass rods (one I already have; three together are abt. USD 300), I'd be able to erect a nice fieldday antenna: a 30m fullsize two element loop antenna. A neat detail that my fevery brain has already worked out is the linear loading that the coiling of the wire along parts of the rods would provide. So a forty metres gain antenna is certainly feasible. The vendor of the most suitable type of fibreglass rods was already sold out on Sunday which kept me from being carried away. Gotta have to read more in Moxons book before I go into action. Big wire antennas is where the fun is!

Oh, before I forget: I had my homebrew 20m CW rig measured with professional equipment. I was prepared for the worst, but the results are very nice: 3.4 watts out, the first harmonic is 47dB down (the second only 45dB, but that's not bad either) and sensitivity is excellent: 0.16mV for 10dB S/N. It's a 20m CW rig from OHR (has no fancy name but is apparently a predecessor of the 'Explorer') that I built into a homebrew enclosure. The technician commented to a bystander that this was only the fourth homebrew rig on this year's Hamradio that he had to do measurements on. The overall activity on homebrewing might be not as bad as this indicates since there were a few more booths fitted with lab equipment.

Unfortunately the local server went down during the weekend, so I am going to have to retrieve Saturday's and Sunday's postings from LEHIGH.EDU. Looking forward to read all the Fieldday reports ...

Vy 72
Richard

--
Richard Hieber, DL8MFQ/AA8CP
sz0026@daphne.rrze.uni-erlangen.de

From qrp-l@lehigh.edu Mon Jul 3 19:03:59 1995
From: "David D. Meacham" <ddm@datatamers.com>
Subject: [1429] New mechanical filters
Message-ID: <Pine.3.89.9507021829.B25843-0100000@dt1.datatamers.com>

Gang,

I'm selling some Collins mechanical filters from an estate. Each is

suitable for use in a home-brew SSB superhet. Here's what I have:

3ea F455Y-21 2.1kHz @ -6dB, 5.3kHz @ -60dB, cylindrical, leads at ends,
fits Collins KWM-2.

1ea F 455C-31 3.1 kHz @ -6dB, probably 6.5kHz @ -60dB, rectangular case,
mounting pins and lead pins out the bottom.

All are "symmetrical bandpass" type, brand new in factory boxes (sealed).
I believe all are "high" impedance (27k Ohms in KWM-2) and require about
120pF in parallel with input and output to resonate the transducer coils.

Price \$20.00 each plus \$3.00 shipping! (I see these for \$60.00 and more,
used.)

If you want one (or more!) please E-mail me directly at:

ddm@datatamers.com

72, Dave, W6EMD

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: ab4el@cybernetics.net (Stephen Modena)
Subject: [1430] No AA4XX...but UR4WWT
Message-ID: <9507030255.AA20072@cybernetics.net>

I saw Paul's (AA4XX) note about the 1 mw beacon running a
few miles south of me. :^)

Sunday evening: no can hear...just some 0's; SSB; digital.
Will try again.

But, tuned down to the low end and heard UR4WWT (Estonia)
blazing away at 4 watts.

After he struggled through a QSO with WW2G, I got him on
the first call...579 both ways at 02:25 UTC, 03 Jul 95,
on 7.006.76 MHz...

I was running 4 watts also. My mistake was not to have tried
it at 1 W first. :^)

I guess the band is open.

--

73/Steve/AB4EL ab4el@Cybernetics.NET in Raleigh, NC 35.81245N, 78.65849W

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: stratton@MIT.EDU (Chris Stratton)
Subject: [1436] pixie2
Message-ID: <9507030441.AA10656@MIT.EDU>

Well, since I sent my previous message about the pixie a few hours ago, I've made a bit of progress - it no longer oscillates or screams, and it finally has a little bit of sensitivity.

What I learned:

the lm386 needs a big filter cap (470 uF) soldered right across its power pins or otherwise very close to it.

Put a .1 uF cap from headphone side of the audio output cap (from the 386) to a 5 ohm resistor to ground.

(these two helped cut down the audio oscillations. I also wound the headphone cord through an RFI-type torroid since it seemed to be coupling a lot of RF into the 386, but I don't think that really accomplished much)

The emitter of Q2 (key line, receive sampling point) must go to ground through .005 to .05 uF for there to be any receive audio - no cap here = no audio, too much capacitance = overly-low-pass-filtered audio.

Has anyone else built one of these using torroidal cores? I used an ft37-43 for L2 (100uH) and ft50-43 for L1 (15uH) and an T50-2 for L3 (1 uH for 40m). These weren't ideal choices - just what I found first. What have people been using for their inductors?

I'd be interested in hearing about other people's successes and failures with this little rig...

Chris, N1IIR
stratton@mit.edu

(If anybody ever hears a really, really weak CQ on 7.040, please answer up about 700 hz)

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: stratton@MIT.EDU
Subject: [1445] pixie2
Message-ID: <9507031637.AA28826@milanese.MIT.EDU>

In regard to my suggestions about fixing pixie2 audio problems -

I made those before I'd managed to print the entire circuit diagram - but now that I have it I'm not sure they make sense.

Specifically, it looks like power to the audio amp is cut by keying the rig - thus putting a big cap on the audio amp power supply is a no-no. But one still might try something a bit bigger than the spec'd 10uF for C10.

I'll have to see if adding D1 to pull up the key/recieve sampling line has any improvement on the sensetivity of mine.

I do think modifyiing the audio output like this would help:

```

\6 10uF
Lm386 >--||---T-----o audio out
/          |
           = .1 uF
           |
           < 10 ohms
           >
           |
          GND
```

This seems to cut down on the audio oscillation in mine.

Chris, N1IIR
stratton@mit.edu

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: David Johnson <djohnson@acpub.duke.edu>
Subject: [1427] pixie2 motorboating!
Message-ID: <Pine.SOL.3.91.950702192439.21333A-100000@godzilla.acpub.duke.edu>

Hi gang! I cobbled together a pixie2 last night, on one of those r. shack "experimenter boards", and it oscillates like crazy! I mean big sound in phones! The frustrating part is that I can

hear some code in the background (no, not left-overs from field day - ;-) so I think that if I get this one problem cured, I can work some DX! ;-)

Any suggestions?

I used 2n3904 transistors, and a 7809 regulator which provides about 8.6v from a 12v bat. Pretty much all else is standard. Oh, I put a 10uF electrolytic across the input of the regulator to ground, and it affected the freq of the "motorboating" (higher freq with the cap) but still it's out of control. Also tried 0.1 uF cap across the output of the reg to gnd; no affect apparent. HELP!

After I get this fixed I will get the NC40 receiver working (xmtr works fine, but no rcv! :-(and the TenTec 6m transverter, and the sw30-40, and the ...

Thanks and have fun hammin'

Dave

David W. Johnson	Power is no substitute for skill
Amateur Extra WA4NID	QRP ARCI 6546
email: djohnson@acpub.duke.edu	G-QRP 4864
packet WA4NID@KB4WGA.NC.USA.NA	NorCal 355

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: pelt@vt.edu (Randy Pelt)
Subject: [1449] Plessey IC's
Message-ID: <199507031751.NAA115482@nss1.CC.Lehigh.EDU>

I'm really thinking about building the multiband transceiver in the latest RSGB handbook. This thing is loaded with Plessey IC's. Does anyone know where I can get Plessey IC's??? I know they are British IC's, but I would think there's got to be a U.S. distributor.

Can anyone help??? Thanks

Ranson J. Pelt
Internal Audit Manager
pelt@vt.edu

From qrp-l@lehigh.edu Mon Jul 3 19:03:59 1995
From: cebik@UTKVX.UTCC.UTK.EDU
Subject: [1438] QRP+ limitations and modifications
Message-ID: <Pine.PMDF.3.91.950703084126.539091028B-100000@utkvx.utk.edu>

I am relaying the following information from Peter Zenker, who is unable to subscribe to qrp-l because he cannot support the message load at his workplace. I have offered to serve as a link between his group of QRP+ users and qrp-l as we look at the potentials of information exchange on this rig. The information he has supplied should be of interest to many, if not most, QRP+ users, even if you do not plan to implement any of the modifications suggested. Please note the desire to obtain serial numbers of rigs with the modifications already incorporated by Index Labs: if you can assist in supplying the information, you can send Peter a message direct.

I would also like to send Peter a list of QRP+ users (name, call, e-mail address) who are interested in the long term in following the information exchange. Please send me direct a message indicating your interest, and I shall compile a list for him. Please do not overload his business site with this type of message because his boss is watching. However, he would appreciate hearing from you if you have technical information to send (please cc me as well so I can track the link until something better is established-tnx).

-73-

LB, W4RNL

cebik@utkvx.utk.edu

QRP+ user

=====
>From ZenkerPN_at_DEBER@ccip.perkin-elmer.com Mon Jul 3 08:09:55 1995
From qrp-l@lehigh.edu Mon Jul 3 19:03:59 1995
From: Brian Mork <bmark@comtch.iea.com>
Subject: [1431] subscribe
Message-ID: <Pine.SV4.3.91.950702202020.8648A-100000@comtch>

subscribe

--

Brian J. Mork, InCrea (TM) - Pacific Northwest, Voice 509-244-3764

bmark@comtch.iewa.com / ARO ka9snf@ka7fvv.#ewa.wa.usa
USMail 6006-B Eaker, Fairchild, WA 99011

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: H Smith <hbs@crl.com>
Subject: [1453] Survey on Kit instructions
Message-ID: <Pine.SUN.3.91.950703121843.4107A-100000@crl4.crl.com>

Here's another survey. This one might be more relevant.

There are readers of this list who are interested in building kits.

There have been numerous kit product reviews but I would like to get opinions about the kit's INSTRUCTION MANUALS. Some kits are geared more to the experienced builder and hence have fewer detailed instructions.

If you have built a kit, the questions are:

1. What is the model number/name and manufacturers name of the kit?
2. What was your kit building experience at the time you built it (beginner, average, advanced)?
3. Was there a "Theory of operation" section in the manual?
4. In your opinion, were the instructions for the beginning, average, or advanced level kit builder?
5. What is your overall opinion of the instruction manual, Excellent, Good, Average, Below Average, or Poor?
6. Did the kit work when you finished it? If not, was it your mistake or theirs?
7. Do you like the piece of equipment that you built? Do you use it?
8. Other comments about the instruction manual. (optional)

Please answer all of the questions if you can. And, as before, please respond via direct email. Save an electron :-)

Thanks for the responses,

Smitty, NA5K

Henry Smith (hbs@crl.com)

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: H Smith <hbs@crl.com>
Subject: [1441] Survey responses
Message-ID: <Pine.SUN.3.91.950703074536.16767A-100000@crl8.crl.com>

Thanks to all who responded to my little survey questions:

>Does your transceiver receive CW in LSB or USB?
> in otherwords
> When you tune up in frequency on your transceiver, do the signals go up
> or down in pitch?

Without rehashing the whole "offset" thread, the CW tone that we hear on a Superhet Receiver is a result of the product detector injecting a BFO frequency that is either approximately 700-800 cycles above or below the IF.

If the BFO frequency is above the IF, then a CW signal will appear to increase in pitch as you tune up. If you are in LSB, you will get this result.

If the BFO frequency is below the IF, then a CW signal will appear to decrease in pitch as you tune up. If you are in USB, you will get this result.

BFO Freq is above IF = LSB = pitch increases as you tune up.
BFO Freq is below IF = USB = pitch decreases as you tune up.

No big thing!

But if both you and the other station are receiving on the same side of the signal, and if you hear him high, (say around 1200 Hz) then he will hear you low.

If you and the other station are receiving on the opposite sides of the signals (USB and LSB), and if you hear him high, then he will hear you high also.

The question, of course, is how do you know what the other station

is using? :-)

Like I said, no big thing. If you can hear him comfortably, then he will hear you ok. That is, unless one of you called the other with the RIT on! Always disable the RIT when you make a call! (Unless you actually wanted the freq offset).

>From the responses, it appears that most Icoms receive CW on the LSB.

Kenwood and Yaesu vary.

However, the majority of the rigs, both commercial and kits, receive CW on the LSB.

The newer rigs allow you to flip from one side to the other. This is nice because you can sometimes eliminate some QRM.

Some people assured me that there was a LSB standard. The one thing I like about standards is that there are so many to choose from :-).

Thanks again,

Smitty, NA5K

PS: If I have made any glaring mistakes, please let me know by email and I will post a correction. It is not my intention to start a lengthy thread on this subject. TNX

Henry Smith (hbs@crl.com)

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [1437] W03B vs K5F0 on 30M
Message-ID: <199507030501.AAA11110@chuck.dallas.sgi.com>

ROUND 4 between W03B es K5F0

Nearing the end of round four of the twelve round heavy weight battle between Bob White and Chuck Adams, the crowd is anxious. They are wanting blood and they want it now. The contestants are bruised and punchy, but they are holding up well under the most grueling of conditions.

The ring is hot from the summer heat and a claustrophobic ring surrounded by the masses. The sound level is almost deafening with the QRN and QRM levels taking ears and receivers into overload.

Bob relayed to Chuck his contact levels through one of the members of the diner group in MD last week, so here are the totals as seen by the judges at the end of round four.

Bob White, W03B Chuck Adams, K5F0

Power:	0.9 to 4 Watts	950 mW
Contacts:	51	33
States:	23	17
Countries:	9	4

But Chuck is expected to gain some of the loss due to travel last week, since this week Bob is out of pocket. It's a close race and we won't know until the first week of September how this going to turn out.

For those of you thinking that Chuck is using unusual operating skill here or an outstanding antenna system, not to worry. Here is the setup:

Antenna: 30M end fed long wire strung between two large Pecan Trees in East Dallas. Surrounded by other trees. Height above ground is 15 feet. Fed by 300 ohm ladderline about 6 meters long.

Power: 20Ahr Gates Gel-Cells (6-pack)

Tuner: Tucker T-1000

Rigs: SWL-30 for first two weeks

OHR Explorer 30M for second two weeks

going to MXM Simple Transceiver, TXR-30 in a week

All running 950 mW output, the only power output level I have been running for more than two years.

Keyer: AEA CK-2 with Brass Racer paddle averaging 25wpm during QSOs. Got note from Mitch as he has me a new base. Film at 11. :-)

I am still a firm believer that the two most important items in your shack (but not the only important items) are your antenna system and your receiver (and the other stations receiver). Don't skimp here gang. But the above does illustrate that simple wire antennas will do the job. I am hearing ZL, VK, G, F, LV, OK, and lots of

good DX on 30M. Band is open late, so be there be square.

If you look at the financial investment, about \$20 for antenna and \$150 for high-end rig and \$100 for keyer and paddle, we can do a lot for less than \$300 total.

Stay tuned for further developments as they appear here.

dit dit

p.s. In reading July issue of Worldradio, I note that Bill Snyder, W0LHS, author of THE DIGITAL BUS column signs with "DIT DIT". Guess he is QR0. :-)

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: Goran Hosinsky <hosinsky@royac.iac.es>
Subject: [1447] Re: 40M long wire sold
Message-ID: <9507031723.AA06185@royac8.royac.iac.es>

11 what?

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [1448] Re: 40M long wire sold
Message-ID: <199507031726.MAA11817@chuck.dallas.sgi.com>

Details at 11 should probably be "Film at 11". :-)

dit dit

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: dcwill@ix.netcom.com (Dave Williamson aa4zx/8)
Subject: [1444] Re: new group order for QRP+?
Message-ID: <199507031520.IAA24620@ix3.ix.netcom.com>

>>Just wondering if there are enough prospective QRP+ buyers out there to make

>>up another group order?? Can someone in the last group tell me how many it
>>took for the last group order, and was the price \$510 instead of \$595?
>>
>>At that price, I'm pretty interested...
>>
>>1/73rd de dave - aa4zx/8
>
>
>How are you doing on your group order? Are you putting this together?
>What is the best price you got? Thanks. Len Popyack WF2V
>popyack1@rl.af.mil

I'm posting this to the group, Len...

Right after I sent my inquiry message, I found that Stephen Lee, slee@u.washington.edu, is handling this group order. I'd be glad to do it, I reckon, but looks like Steve got there first... ;-) Drop him a note and he'll put you on the list. I quote his address from memory - I'm sure somebody'll correct me if it's wrong.

The price will be \$510 plus, I believe, \$10 shipping, payable in advance. If you use a credit card, you'll not be charged until the rig is shipped.

Index can't handle another group order until mid-late July, so it'll be a few more weeks, at least. (it's July already???? man, time flies)

1/73rd de aa4zx/8 dave
near elkins wv

From qrp-l@lehigh.edu Mon Jul 3 19:03:59 1995
From: Jim Eshleman <lujce@hooch.CC.Lehigh.EDU>
Subject: [1440] Re: Pixie 2 pc board
Message-ID: <95Jul3.101938edt.14522-3+4@hooch.CC.Lehigh.EDU>

Dan's modified Pixie2 PCB layout and description are available from the list server (listserv@Lehigh.EDU) via the commands:

GET QRP-L/RIGS WD8AAU_PIXIE2.PS
GET QRP-L/RIGS WD8AAU_PIXIE2.TXT

or anon ftp:

ftp://ftp.lehigh.edu/pub/listserv/qrp-l/rigs/wd8aau_pixie2.ps
ftp://ftp.lehigh.edu/pub/listserv/qrp-l/rigs/wd8aau_pixie2.txt

/jim

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: stratton@MIT.EDU (Chris Stratton)
Subject: [1428] Re: pixie2 motorboating!
Message-ID: <9507030046.AA09442@MIT.EDU>

I also built a pixie this weekend and am having a heck of a time with oscillations in the audio amp. Mine is 'dead bug' (ie, built on unetched pc board) and 40 meters. Transistors are junk box 3904's. It transmits fine - but receiving is the problem.

I got the .ps file off the ftp site and printed it, only it seems to have some postscript erros. The RF part came out fine, but the connections around the lm386 audio amp are all missing - so I'm working from other receiver plans that use 386's as audio amps.

Without any cap between pins 1 and 8 it seems to behave reasonably, but there's not much gain and I don't hear any signals - although it does weakly receive the LO of another receiver I built a while ago. So, according to the typical way of using the 386 I put a 10uf cap between pins 1 and 8 - now there is plenty of gain, but it tends to go into oscillation.

I can get the 386 by itself to quiet down - but it keeps getting messed up by all the RF comming from the emitter of Q2, and also on the power supply. (I'm using Ni-Cads at 8.4v and LOTS of filter caps). I tried powering the audio stage through an RF choke - helps a bit, but doesn't solve the problem.

I've spent almost the entire weekend working on this thing, adding components here and there and watching what happens on the scope, but haven't figured out the problem.

Anyone have any idea how to get enough gain to hear anything without making it emit inhuman squeals like something being tourtured to death?

Chris, N1IIR
stratton@mit.edu

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: Erik Werner <werner@cadman.cit.buffalo.edu>

Subject: [1432] Re: pixie2 motorboating!
Message-ID: <199507030323.XAA11633@cadman.cit.buffalo.edu>

>
> I've spent almost the entire weekend working on this thing, adding
> components here and there and watching what happens on the scope, but
> haven't figured out the problem.
>
> Anyone have any idea how to get enough gain to hear anything without making
> it emit inhuman squeals like something being tortured to death?
>
> Chris, N1IIR
> stratton@mit.edu
>
>

Me too! but when I throw the power switch from the 9v alkaline I get a sound not too different from a automatic rifle. I'm going to go over the plans again and see if I made a mistake. I built this one on a perf board where I have maybe 4-5 component leads all soldered together at different points. I cut all of the excess trim from the leads to get rid of any unwanted rf. The first attempt the transmit didn't work and when I touched the cap to pins 1 and 8 I got when 940kHz. Go figure. At least that was a set in the right direction.. :)

Like I said, all I get now is the oscillations of a machine gun through the headsets. Any suggestions from fellow pixiers?

Erik

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
From: Jim Eshleman <lujce@hooch.CC.Lehigh.EDU>
Subject: [1452] Re: Ref. uncompress .z files on PC
Message-ID: <95Jul3.151144edt.14522-2+8@hooch.CC.Lehigh.EDU>

Gang,

In addition to the utilities mentioned by Russ, N9RJ, the GNU GZIP utility should also be able to uncompress the unix ".Z" files on MSDOS. I've stored the file gzip124.zip in qrp-1/tools.

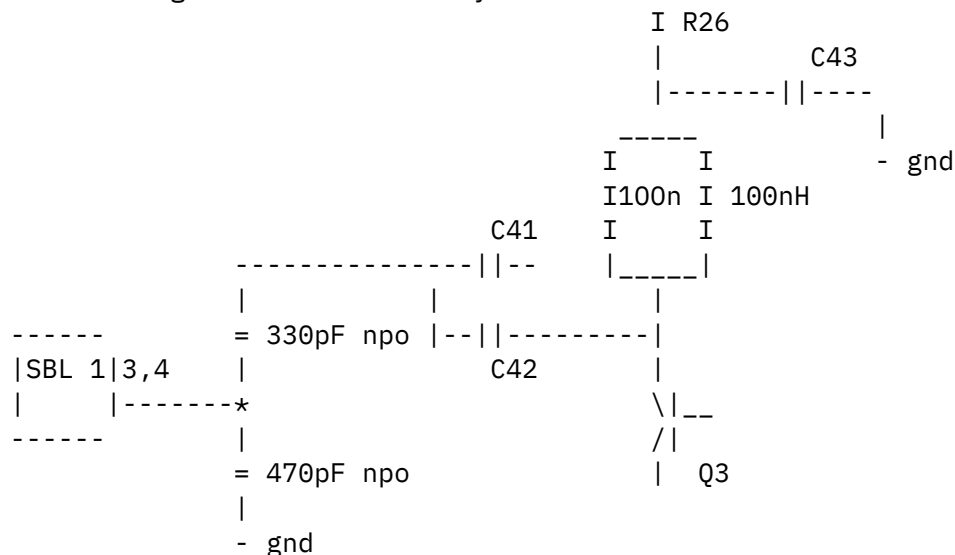
/jim

From qrp-1@lehigh.edu Mon Jul 3 19:03:59 1995
 From: ZenkerPN <ZenkerPN_at_DEBER@ccip.perkin-elmer.com>
 Subject: Re[2]: QRP+

Hello LB,
 thanks for replay and your offer to act as an interface between me and my gang and the qrp-1. We are very interested. The gang here in Berlin consists of abt 10 qrp+ users and we have a good contact to a dutch user-group too. Abt two dozen of QRP+ users all over Europe contact me frequently vi PR.

I add the major mods to the QRP+, as we know them here in Berlin:

1. Everyone who has seen a QRP+ at a Spectrum Analyser, must be concerned about the high level spurious of that rig. We had rigs under test with worst case spurious only -20dBc (dB under Carrier). The solution seems to be to make the IF Amplifier Q3 resonant at 50 MHz (N6CM / PA0RBC). I tried this at two rigs. The spurs have gone off immediately, but you must care off, if you are not exact at 50 MHz, your power also goes off immediately.



You can use 2 100 nH chokes in parallel, the other way is to form a coil of abt 2 wdg 0.6mm AgCu 3mm DIA.

Allthough we heared that this mod should be in all new rigs, the latest we have seen (Serial Number > 1200 doesnt)

2. The originally used Low Pass filter have been changed with very good results against Cauer filters. developed by N6CM As we heared as rumour, this type of filter will now be built in in all QRP+ (Any information abt the first serial number??)

3.ALC Modification QRP+:

In some rigs the ALC attacks at very low level. Put a variable resistor (abt 2k5) between R16 and R15 at the XMTR PCB. At zero OHM, you have the same level as in the original. Adjust the resistor carefully, best way to do is with a twotone generator and scope.

4. Standing Current stability:

In older rigs, the gate of IRF 510 is directly driven by power supply via R14, R18,R7. This causes high distortion in case of weak power supply. Replace R14 with an 78L005 and readjust standing current. This is done in all newer rigs by factory

Output transformer:

We got better input to output power after replacing the output transformer against one using an FT43 double hole body. 6 turns bifilar windings. The two wires have been drilled before making the transformer to give better coupling.

Some Rigs ,flipped" after touching the RIT switch, also sometimes after using one of the push bottpoms. Lutz, DL7APP took 4n7 capacitors at all IO pins of the processor with good results.

The E-Prom MOD:

DH7ADR, the computer specialist of the Berlin QRP gang, hacked the QRP+ E-Prom (Bruce promised to send a docu, but didn't, so we had to hack.) Andy now programmed the E-Prom to run in 1 WPM steps from 12 to 20 wpm and then in 2 WPM steps up to 36 WPM. As a gift, my QRP+ now doesn't show his serial number after power on, but it shows my call. Andy in the moment is working to let the QRP+ swith to CW after power on. (It remembers all parameters e.g. CW speed, Filter bandwidth, QRG, but never remembers the last mode)

If One is interested, I can send a file with the new E-prom contents.

The QRP+ sometimes has problems with dismatched Antennas e.g. portable, it radiates at all known and unknown frequencies until you open the key or the Power Fet is dead (mostly it is dead very soon). With the famous matchbox frontend, constructed by HAJ0, DJ1ZB (you find it in the G-QRP Antenna Book) this will never happen because with this frontend, formed as a Wheatstone bridge, detecting as low levels as some milliwatts, the QRP+ will see every time 50 Ohm, even without an antenna or with a shortcut.

```
- gnd          1N4148
|              --|<--|gnd
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-72- from Berlin
de Peter, DL2FI